

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **September 29, 2025**

ASP Isotopes Inc.

(Exact name of registrant as specified in its charter)

<u>Delaware</u> (State or other jurisdiction of incorporation)	<u>001-41555</u> (Commission File Number)	<u>87-2618235</u> (IRS Employer Identification No.)
<u>601 Pennsylvania Avenue NW South Building, Suite 900 Washington, DC</u> (Address of principal executive offices)		<u>20004</u> (Zip Code)

Registrant's telephone number, including area code: **(202) 756-2245**

Not Applicable

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.01	ASPI	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

As previously announced, effective October 1, 2025, Paul Mann, the founder, Chairman and Chief Executive Officer of ASP Isotopes Inc. (the “Company”), was appointed Executive Chairman of the Company and began taking a temporary leave of absence from his Chief Executive Officer duties for health reasons. In consultation with Mr. Mann, and effective October 1, 2025, the Company’s Board of Directors (the “Board”) appointed Robert Ainscow, the Company’s Chief Operating Officer, to serve as Interim Chief Executive Officer (principal executive officer), in addition to his current duties.

In the Executive Chairman role, Mr. Mann has responsibility, working with the Interim Chief Executive Officer and the Board, for: the overall leadership and strategic direction of the Company; providing guidance and support to senior management of the Company; and the coordination of the activities of the Board. In the role of Interim CEO, Mr. Ainscow has the responsibility for managing the CEO’s direct reports and communications with the Company’s industry partners, shareholders and other important stakeholders, among other CEO duties.

Biographical and other information for Mr. Robert Ainscow is set forth in the Company’s Annual Report on Form 10-K/A filed with the Securities and Exchange Commission on April 30, 2025 and is incorporated herein by reference. There is no arrangement or understanding between Mr. Robert Ainscow and any other persons pursuant to which he was selected as an officer. The Company has not entered into, amended, or modified any plan, contract, arrangement, grant, or award in connection with Mr. Robert Ainscow’s appointment as Interim Chief Executive Officer.

Mr. Robert Ainscow is the brother of Donald Ainscow, who has served as Executive Vice President, General Counsel and Secretary since joining the Company in August 2025. Mr. Donald Ainscow is compensated according to the Company’s standard practices, including participation in its employee benefit plans generally made available to employees of a similar responsibility level. His current base salary is \$425,000 per annum and he is eligible to receive an annual bonus and equity awards as determined by the compensation committee. He received an initial grant of 400,000 shares of the Company’s common stock pursuant to the Company’s 2024 Inducement Equity Incentive Plan, which shall vest (subject to compliance with the applicable vesting conditions) in eight equal semi-annual installments over a four-year period. The compensation of Mr. Donald Ainscow was established by the Company in accordance with its compensation practices applicable to employees holding positions of a similar responsibility level and without the involvement of Mr. Robert Ainscow.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ASP ISOTOPES INC.

Date: October 3, 2025

By: /s/ Donald G. Ainscow

Name: Donald G. Ainscow

Title: Executive Vice President,
General Counsel and Secretary